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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,890

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Takami Sugioka

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EXAMINER

DONDERO, WILLIAM E

ART UNIT

PAPER NUMBER

3654

NOTIFICATION DATE

DELIVERY MODE

08/24/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary

Application No.

10/522,890

Applicant(s)

SUGIOKA ET AL.

Examiner

William E. Dondero

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the horizontal plane (Claim 1) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding Claim 1, there is no written description in the originally filed Specification of a horizontal plane in which axes of at least two bobbin holders lie.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1, the limitation, "a horizontal plane" renders the claim indefinite because it is unclear how the horizontal plane is defined.

Regarding Claim 11, the limitation, "said winding machine" renders the claim indefinite, because it is unclear how the feeding roller can be part of the winding machine and be upstream of the winding machine.

Claim Rejections - 35 USC § 102

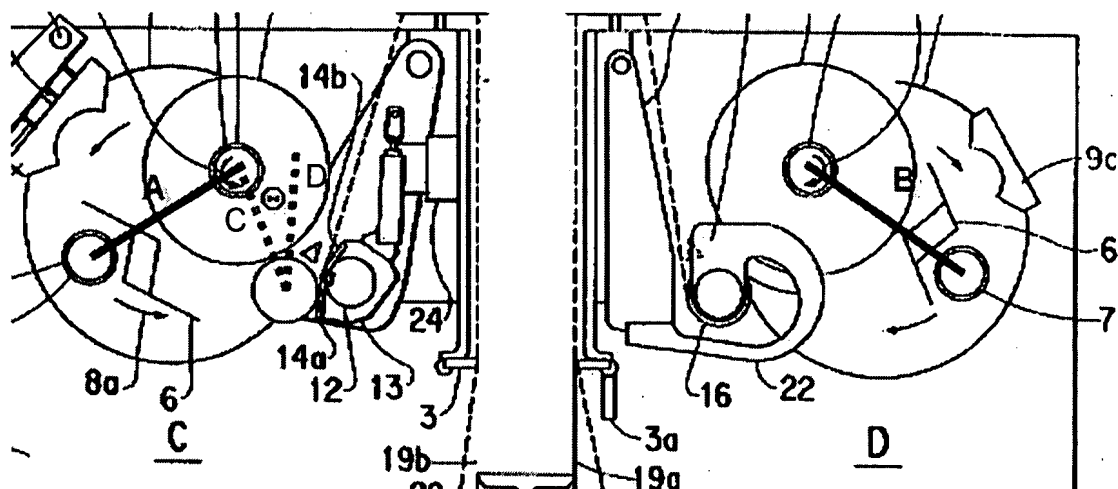
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 7-10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Daly et al. (US-6015113). Regarding Claim 1, Daly et al. discloses a revolving type winding machine comprising two turret tables C, D having at least two bobbin holders 5a, 5b rotatably mounted thereon, respectively, a press roller 16 and a traverse device 15 are positioned above a horizontal plane in which axes of the at least two bobbin holders lie (Column 5, Line 24-37) upstream from the respective turret table, whereby a bobbin 7 installed on one bobbin holder is switched to a bobbin 7 installed on the other bobbin holder when the yarn wound on the bobbin reaches a predetermined amount characterized in that the two turret tables are disposed on the opposite sides of a yarn passage, rotational directions of a press roller provided for one turret table and a press roller provided for the other turret table are reversed, rotational directions of the one turret table and the other turret table are reversed, and the center of each press roll touching a bobbin holder or a yarn being wound during winding of yarn is located between an imaginary line A (see figure below) passing through the centers of the two bobbin holders projecting from the one turret table and an imaginary line B (see figure below) passing through the centers of two bobbin holders projecting from the other turret table (Figure 1; Column 6, Lines 49-53).



Regarding Claim 2, Daly et al. disclose an imaginary line C (see Figure above) connecting the center of the press roller and the rotating center of the bobbin holder forms an angle Θ which is not larger than 45° relative to a vertical line D (see Figure above) (Figure 1). Regarding Claim 3, Daly et al. disclose the imaginary lines A, B connecting the centers of the respective bobbin holders form "A" shape at least upon start of yarn winding (Figure 1). Regarding Claim 5, Daly et al. disclose that the traverse device 15 is disposed between at least two of the two press rollers (Figure 1). Regarding Claim 7, Daly et al. disclose that the press rollers are moveable so that distance between the centers of the press rollers and the at least two bobbin holders are expanded as the amount of yarn wound on bobbins inserted onto the bobbin holders increase (Figure 1). Regarding Claim 8, Daly et al. disclose the turret tables having the at least two bobbin holders projecting therefrom are moveable so that distance between the centers of the at least two bobbin holders and the press rollers are expanded as the amount of yarn wound on bobbins inserted onto the bobbin holders increase (Figure 1). Regarding Claim 9, Daly et al. disclose the press rollers

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are linearly moveable (Figure 1). Regarding Claim 10, Daly et al. disclose the press rollers are rotatably supported at an end of an arm 18, the other end of the arm is pivoted (Figure 1). Regarding Claim 13, Daly et al. disclose the imaginary lines passing through the centers of the respective bobbin holders form an acute angle at their intersect at least upon start of yarn winding (Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daly et al. (US-6015113). Daly et al. disclose the revolving type winding machined as advanced above in regards to Claim 1. Daly et al. are silent about a feed roller disposed upstream the winding machine. However, it is notoriously old and well-known to add a feed roller to a yarn spinning machine upstream of the winding apparatus. It would have been obvious to one of ordinary skill in the art at the time of the invention to add a feed roller upstream of the winding machine of Daly et al. to provide more time for the yarn to quench and cool while maintaining a constant feed speed to the bobbins.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daly et al. (US-6015113) as applied to claims 1-3, 5, 7-10, and 13 above, and further in view of Tschentscher (US-4136834). Daly et al. are silent about a threading device. However, Tschentscher discloses a threading device 22, 23a-d disposed corresponding to a

bobbin holder located at winding position, the threading device is provided with a threading guide 23a-d, and during storage (Figure 1), the threading guide is located at a storing position which is sandwiched by loci drawn by outer surfaces of bobbins inserted onto the bobbin holders projecting from a turret table upon rotation of the turret table, while upon threading, a plurality of threading guides 23a-d are moveable in such directions that they move away from each other from the storing position to threading position (Figure 3) which exceeds contacting lines between the press roller and other surfaces of rotating bobbins which are contacting with the press rollers (Figures 1 and 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to add a threading device of Tschentscher to each turret table of the machine of Daly et al. to eliminate the need for the operator to manually thread up each bobbin thus decreasing downtime and increasing production time.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daly (US-6015113) as applied to claims 1-3, 5, 7-10, and 13 above, and further in view of Schippers et al. (US-4505437). Daly et al. are silent about the traversing device having a plurality of rotating blades, rotating in an opposite direction, so as to traverse the arm. However, Schippers et al. discloses a traversing device 1 having a plurality of rotating blades 5, 6, rotating in an opposite direction, so as to traverse a yarn (Figures 1, 1A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the traversing guide of Daly et al. with the traversing guide of Schippers et al. to increase the speed and efficiency of the traversing device while shortening the spindle length as taught by Schippers et al.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daly et al. (US-6015113) as applied to claims 1-3, 5, 7-10, and 13 above, and further in view of Siepmann et al. (US5779170). Regarding Claim 13, Daly et al. is silent about the yarn encircling less than 180 degrees of the press rollers. However, Siepmann et al. disclose a turret winding device in which a yarn 1 encircles a press roller 3 less than 180 degrees. It would have been obvious to one of ordinary skill in the art at the time of the invention to encircle the yarn less than 180 degrees around the press roller of Daly et al. as taught by Siepmann et al. to reduce the amount of friction between the yarn and the roller.

Response to Arguments

With respect to Applicant's arguments starting on page 7, line 1 to page 8, line 2 Applicant argues Daly et al. does not disclose a press roller and a traverse device positioned above a horizontal plane in which axes of at least two bobbin holders lie. Applicant's arguments have been fully considered but they are not persuasive. With regards to the section of Daly et al. (Column 5, Lines 24-37), disadvantages of having a press roller and traverse device above a horizontal plane defined by the bobbin holder axes are given. However, the section further demonstrates that the embodiment of a press roller and traverse device being above such a plane with the corresponding geometry is known.

With respect to Applicant's arguments starting on page 8, line 3 to page 8, line 6, Applicant argues Daly et al. discloses the yarn encircling the presser roll by more than

180 degrees. Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment, including the addition of the limitation, "positioned above a horizontal plane in which axes of said at least two bobbin holder lie" (Claim 1, Lines 3-4) necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to William E. Dondero whose telephone number is 571-272-5590. The examiner can normally be reached on Monday through Friday 6:30 am to 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WED/


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